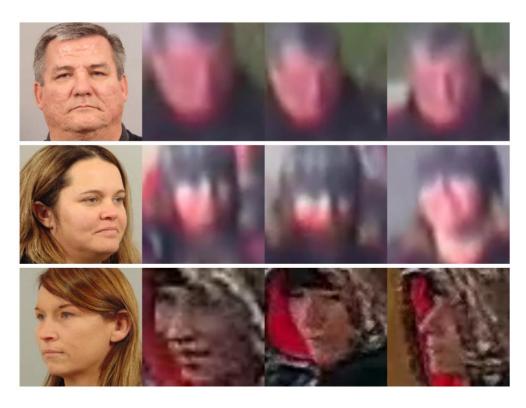


Video Face Recognition: Component-wise Feature Aggregation Network (C-FAN)

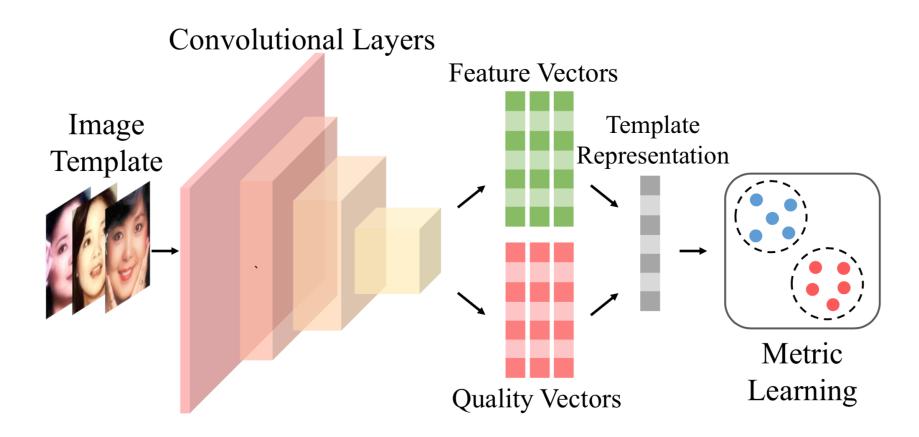




- Examples of video clips and detected faces on IJB-S dataset [1].
- Each person has a collection of frames in a video.
- Can we learn a single feature vector for each face in a video?

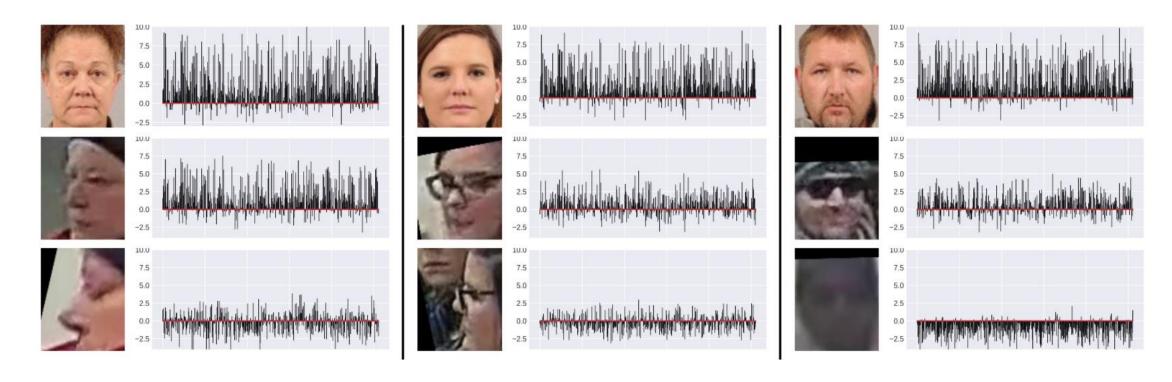
[1] Kalka, Nathan D., Brianna Maze, James A. Duncan, Kevin O'Connor, Stephen Elliott, Kaleb Hebert, Julia Bryan, and Anil K. Jain. "IJB—S: IARPA Janus Surveillance Video Benchmark."

Component-wise Feature Aggregation Network (C-FAN)



- C-FAN outputs a 512-D quality vector associated with each 512-D face feature vector.
- The feature vectors are aggregated with the component-wise quality scores into a compact feature vector.

Quality Scores Given by C-FAN



- Quality values for each of the 512 components.
- Each column shows a high-quality photo, a medium-quality frame and a lowquality frame from the same person, respectively

Results on IJB-S

